THE NATURE AND USEFULNESS OF CORPORATE CASH MANAGEMENT SERVICES PROVIDED BY BANKS TO COMPANIES IN HONG KONG

by

YU YING CHOI, ALAN ABEL
余英才

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John L. Espy

Prof. John L. Espy

Advisor

Abstract

The rapid rate of computerisation in the office is substantially changing the face of business every day. Whereas previously computers were used merely for the storage of information and for laborious, mechanical and repetitive calculations, they have now become indispensable aids to management decision making.

The computerisation of banking in Hong Kong began with Standard Chartered Bank (formerly The Chartered Bank) installing an on-line NCR computer in 1967. Since then, the routine chores of banking operation have been performed by computers, including the calculation of daily interest on savings account balances, production of account statements and the maintenance of customer records.

For the man in the street, computerised banking has brought a host of concrete benefits. The proliferation of automatic teller machines means that he can withdraw money from his account twenty-four hours a day at a large number of convenient locations. A pilot scheme, generally known as EFTPOS (Electronic Funds Transfer at the Point of Sale) is now underway which enables customers to use their automatic teller cards to purchase goods in selected outlets such as department stores by direct debit, on the spot.

As for banks, computers have also made possible management information systems which analyse operational efficiency, profitability and funding requirements.

Some benefits of computerisation, of course, have been extended to corporate customers as well. Like retail customers, they get computer printed statements. However, the needs of corporations to transfer their funds efficiently and obtain up-to-date information about the status of their accounts have remain unsatisfied.

The volume of transactions going through a corporate account is naturally many times that of a personal account; so are the amounts involved. It is therefore necessary for corporate treasurers to monitor much more closely and frequently the status of their companies' accounts. Despite computerisation in many aspects, corporate treasurers are as helpless as ever when faced with the problems of managing their companies' cash.

In recent years, banks in Hong Kong have begun providing what are called "cash management services". Although this is a significant development in corporate banking, usage of the services remains relatively low, and knowledge about them is rather sketchy. This is borne out by the fact that none of the business research papers in the MBA Programme in the Chinese University have covered the subject.

It is hoped, therefore, that this paper will inspire further, more detailed, research into the subject vital to the success of any business.

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CHAPTER I

INTRODUCTION

The Importance of Cash Management

While being the most liquid asset of a company, cash is also its most current liability. As an asset, it consists of hard currency in hand, such as banknotes and coins, and ready balances in bank accounts available for use. As a liability, it is encountered most often in the forms of unpaid invoices for purchases and bank loans falling due that have to be repaid.

Effective cash management is vital to the successful day-to-day operation of a business --- many a large company has collapsed as a result of poorly co-ordinated cash flow. This is why the cash budget, which shows the amounts of cash a firm expects to receive and to disburse during a specific period, is an important tool in financial management.

The importance of proper cash management is underlined by Alfred L. Hunt: "Cash is involved in almost every business transaction, either at the time of the transaction or shortly after. Therefore, cash must be available to cover any purchase, and it should result from every sale. Making it available to cover the cost of doing business and putting it to good use after it is received is of vital importance to every company."[1]

According to J.T. Hackett and G.R. Thurston[2] increasing emphasis has been placed on the management of cash resources of corporations since the early 1960's as a result of higher opportunity costs in the form of higher interest rates on the one hand, and programmes to improve asset utilisation designed to increase the return on shareholders' investment on the other.

Partly as a result of computerisation, banks have become more and more actively involved in a company's cash management. Instead of remaining passive agents, acting merely as depositories or unconcerned lenders, banks are now offering computer-based information services to aid large

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[1]Hunt, Alfred L. Corporate Cash Management AMACOM 1978

[2] "Cash Management" by J.T. Hackett & G.R. Thurston in Financial Executive's Handbook ed. Richard F. Vancil, Dow-Jones-Irwin, 1970

corporations in the management of their cash flow. Some banks, particularly in the United States, are even offering consultancy services to companies regarding their cash management systems.

Paul J. Beehler's explanation of the trend for banks to provide these information services is that they wish to "to develop specialised techniques to attract and hold large corporate relationships."[1]

Objectives and Scope of Study

The inspiration for the present study originated from the establishment in the summer of 1984 of an "International Cash Management Unit" in the bank where the author is currently working --- Standard Chartered Bank. Headed by a full-time manager, the Unit owes its existence to a decision by top management in the London Headquarters, which apparently perceives a need among major corporate customers hitherto not satisfied by services the bank has been providing.

The author's prime objective in undertaking the present study is to integrate cash management

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[1] Paul J. Beehler Contemporary Cash Management John Wiley & Sons, 1978

concepts at an academic level with practical information about services offered by banks to determine how effective they are as an aid to the corporate customer.

This paper is intended to cover, albeit superficially, the following areas:

1) basic cash management concepts and the role of banks in this important activity
2) the needs of corporate treasurers and the problems they face
3) the types of cash management services now available in Hong Kong
4) other aspects associated with the usage of cash management services
5) the possible future prospects for cash management services in Hong Kong.

It is hoped that this study will also be a useful source of information for the Standard Chartered Bank International Cash Management Unit in preparing a longer-term strategy for the allocation of its resources.

Methodology

The intention of this study is to present an overview of the current status of cash management services banks are offering. As such, it does not pretend to be exhaustive.

Preliminary investigations by the author reveal that there are a relatively small number of corporate customers currently using cash management services provided by an even smaller number of banks in Hong Kong. It is perhaps not co-incidental that the banks offering such services as well as the companies using them are predominantly multinational institutions.

In view of the foregoing, the author feels that a qualitative approach would be more appropriate than a quantitative one for the study.

The analytical framework has already been built into the structure of the study itself. The academic and theoretical investigation of cash management in the context of overall corporate finance establishes the objectives and strategies that need to be adopted. The practical sections dealing with actual services and the general reaction of users will assess whether and how they have enabled corporations to realise the objectives and strategies identified.

Information has been gathered from a variety of sources, including the following:

1) published books on cash management
2) published articles devoted to special aspects of cash management
3) promotional brochures issued by banks on their particular services
4) unpublished material used in lectures and seminars.

To supplement information gathered from the above sources, personal interviews have also been conducted with top bank and corporate executives to gain an insight into their practical experience. These executives are either directly responsible for the administration of the services or frequent users.

CHAPTER II

CASH MANAGEMENT AND THE COMPANY

What is Cash

In its simplest form, a firm's cash holdings usually consist of currency and bank deposits. As a key component of the firm's balance sheet, it is important in that it determines, to a large extent, how liquid the firm is.

No matter what business a firm is in, the activities in which it engages always involve three elements: inputs, be they raw materials or other basic services; transformation of these inputs by its own expertise; and outputs, which are the end products or services available for sale.

The usage of inputs and subsequent sale of outputs by a firm result in two financial processes: receipts and payments. Cash is the vehicle through which these payments and receipts materialise, either in the form of currency notes, or in the form of a transfer of bank deposits using cheques.

The ultimate aim of business, of course, is to pay out to others less than what is received, and the difference is broadly referred to as profit. Although the excess of income over expenditure in a company does not remain as cash for long --- it is usually invested in some fixed asset, inventory, etc. --- the importance of cash as the very basis of all business activities is obvious.

Definition of Cash Management

The concept of cash management has been given thorough treatment in many contemporary financial management textbooks.

In their Introduction to Financial Management Schall and Haley define cash management as follows:

> "In current practice the term cash management refers to the general problem of managing the firm's cash balances (currency and demand deposits), cash flows (receipts and collections), and short-term investments in securities."[1]

Cash management, in other words, is concerned

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1 Schall, Lawrence D. and Haley, Charles W. Introduction to Financial Management McGraw Hill, 1983, pg. 522

with managing a flow, i.e., cash coming into or going out of the firm; as well as a stock, i.e., the residual at a particular point in time after the flows have stopped. Cash flows, of course, never stop --- cash movements for a going concern are dynamic in that the flows are continuous and the stocks change from one minute to another. Nevertheless, it is convenient to analyse stocks and flows as if they were separate events never occurring at the same moment.

Reasons for Holding Cash

It has already been seen that cash is the basis of business activities. Before a more detailed examination of its management is attempted, it would be beneficial to examine some of the motives for a firm to hold cash in the first place.

These motives are usually described as transaction, precautionary and speculative.

The Transaction Motive

The transaction motive is concerned with a firm's ordinary business --- cash enables it to make purchases and sales. In some cases, the retail trade for example, normal transactions are conducted with relatively small amounts of cash. In other cases, ship-building for example, the amounts involved could be enormous. Certain lines of business are subject to cyclical or seasonal patterns of demand. Cash is required for the acquisition of inventory to take account of these patterns.

The Precautionary Motive

The precautionary motive would persuade a firm to hold cash as a safeguard against the unpredictability of inflows and outflows. The more predictable the flows are, the less cash a firm needs to meet unexpected emergencies. In addition, the borrowing capability of a company also has direct bearing on the level of cash it needs to meet unexpected commitments. The better a firm's relationship with banks is, the less cash it needs to hold.

The Speculative Motive

It is not usual for a business to hold cash for the purpose of speculation, i.e., exploiting sudden opportunities with a high degree of risk and which are not in the line of a firm's normal business. For example, a manufacturing company may accumulate a lot of Hong Kong dollars in anticipation of a favourable change in the "peg rate" against the US dollar, instead of investing the cash in its manufacturing operations.

Apart from the above general motives, a firm has a number of additional reasons for maintaining adequate cash in its books.

Trade Discounts

Many suppliers, cognisant of the need for speedy collection as a means of good cash management, offer discounts if materials are paid for by cash within a specified period. An abundant holding of cash will enable the firm to benefit from these discounts, provided of course that the opportunity cost of holding the cash for this purpose is lower than the discount obtained.

Credit Standing

Cash, as it has been pointed out, is an important component of a firm's balance sheet. It is therefore a determinant of the firm's credit worthiness as measured by the current and quick ratios when banks consider loan proposals. It is clear that a firm should endeavour to maintain a reasonable cash position. Moreover, a firm which has good credit standing will be able to negotiate more favourable terms for the purchase of goods from suppliers.

Financing Growth

A large holding of cash will enable a firm to finance its growth at a much faster rate in many ways.

Response to Market Environment

A cash rich company will be able to respond much more positively to sudden, unexpected changes in the market, e.g., price wars and new product launches by competitors.

Cash Management Objectives

The concept of cash management is a reasonably simple and straightforward one. The ultimate objective is to maximise the productivity of cash for the company.

In order to manage his company's cash properly, a financial executive has to ensure the following:

1) that the outflows are matched, both in timing and quantity, by the inflows, and
2) that the maximum return is obtained on the stock that remains.

By matching cash inflows and outflows, a financial executive can minimise the cash balance required for the company's day-to-day operations. With a given amount of cash available, the lower the company's holding, the larger the number of transactions it can finance, and the higher its productivity.

Cash Management Strategies

There are a number of strategies a financial executive can adopt if he is to maximise the productivity of his company's cash resources. These strategies would probably include the following:

1) Proper cash planning with
   - -long range cash projections, and
   - -short range forecasts of cash position
2) Effective control by
   - -speeding up collections
   - -reducing investment in inventories
   - -improving control over payables and related payments

3) Generating additional cash through
   - reduction in "company balances" on deposit with banks
   - improving control over intercompany transfers
   - more efficient utilisation of facilities
   - more effective use of manpower
   - strategic tax planning
4) Utilisation of excess funds by
   - investing in short-term obligations
   - reducing loans with cash and save interest
   - extend loans to subsidiaries
   - investment through mergers and acquisitions or in plants.[1]

The Role of Banks

The traditional role of banks in a company's cash management has been essentially a passive one. As depository institutions, they act as little more than safes where cash can be kept until needed.

The most that banks did, until the middle of this century, was clear the cheques deposited through

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[1] Horn, Frederick E. "Managing Cash" Journal of Accountancy April, 1964, pp 56-62

the system and advise the company when the funds were available for use.

When the company needed to pay its suppliers or one of its subsidiaries needed to finance an emergency, it would give the banks an instruction to transfer funds to an appropriate account. The bank, however, only responded to instructions.

Banks began to take a more active role in their clients' cash management in the United States in the late 1940's with an innovative but simple step to speed up the receipt of customer payments. The RCA Corporation first recognised that funds in the form of payment receipts were tied up with the processing of payment information and could not be put to use as quickly as they might be.

In response to this realisation, RCA Corporation's banks devised a novel way of reducing the amount of time required for payment receipts to be processed. Customer payments were deposited into a number of 'lock boxes' (each a unique post office box for receipt of customer payments). RCA's banks emptied the lock boxes frequently, opened the envelopes, deposited the cheques immediately, and forwarded the payment documents to the company.

From then on, banks have assumed a more and more active role in helping corporate treasurers employ the strategies outlined in the foregoing section to improve the management of their company's cash.

CHAPTER III

CASH MANAGEMENT SERVICES

A Definition

"Cash management services" or "cash management systems" are general descriptions given to a number of services provided by banks to corporate customers in the day-to-day management of their cash.

Since the introduction of lock boxes in the 1940's, cash management services have taken on a variety of meanings over the years. In Hong Kong they are most often equated with electronic banking services for corporations.

Modern cash management systems built around sophisticated information-processing techniques emerged in the United States in the early 1960's, with the introduction of computerised balance-reporting systems. Before then the corporate treasury staff had to call all of the company's banks around the country to learn what its cash balances were before making decisions about cash or investment needs.

Cash management systems expanded during the 1970's and became increasingly interactive. The variety of products also increased to cater for most of the facets of treasury management.

Recent developments have almost made services provided by banks to the corporate treasurer "total" cash management systems. According to Alfred L. Hunt, a total cash management system is one "that will automatically position cash and adjust the supply to meet the demand."[1] Under this system, cash deposited would be concentrated in one or several banks, and that balances over a pre-determined amount would be invested or used to pay loans outstanding. Likewise, cash would be borrowed against a master note established for this purpose if not enough cash was on hand to meet pre-determined levels.

Cash management services were first offered by banks in Hong Kong in the latter half of the 1970's, by which time they had been fully developed in the United States using highly sophisticated computer systems. In addition, since the American banks pioneered the services in Hong Kong among predominantly multinational

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[1] Hunt, Alfred L. Corporate Cash Management AMACOM, 1978, pg. 120

corporations, the services available have been decidedly international. Many of the domestic services that have found acceptance in the United States never developed in Hong Kong.

Early Developments

Since the United States was where banks pioneered cash management services for corporate customers, it is only natural that the majority of the services in the beginning were designed to address problems peculiar to that country.

Before the widespread use of computer in business, the dealys in communication resulting from vast distances in the United States posed a serious threat to effective corporate cash management. Treasurers at that time were faced with a combination of slow clearing of cheques and transfer of funds.

The emphasis of cash management services which found popularity in the United States was mainly on the principles of expediting collections and slowing disbursements. The services were not computer based, although a certain amount of mechanisation was prevalent, and were little more than improvements to back office operations within the bank.

The more common of these early cash management services included the following:

Lock Boxes

A lock box is simply a post office box to which cheque payments to a company are sent. The bank frequently opens the lock box and deposits the cheques in the company's account before the company is advised. Collection of receivables is speeded up considerably this way as the clerical processing of payments is done after the cheques have been deposited and put in the clearing system. The cash is available to the company much sooner.

Concentration Accounts

Concentration accounts are most useful for companies with a large number of local offices scattered over a wide area receiving payment, or those which collect from a large number of customers, each remitting relatively small sums.

Concentration accounts are opened at important centres throughout the country and used as strategic collection points for funds. While payments continue to be sent to local sales offices, divisions and subsidiaries and deposited in local bank accounts, the funds are transferred as quickly as possible to centralised banks by wire transfer, draft or the use of imprest or automatic balances. The collection process is thus speeded up substantially.

Zero Balance Accounts

Zero balance accounts help to slow or better control a company's disbursement of funds. They permit the company to write cheques with no funds on deposit. The bank accumulates the cheques that arrive for payment during the day, and the company wires the funds necessary to pay the cheques at the close of the day.

Preauthorised Payment Services

Preauthorised payments further reduce the time needed for the collection of payments. The company makes agreements with customers to permit the company's bank to debit their accounts directly periodically. Preauthorised payments are actually automatic payments for companies.

Remote Disbursement Accounts

To slow down the disbursement of funds from its accounts, a company may choose to use banks in remote parts of the country, where poor postal services and a lack of clearing facilities ensure that cheques may be presented only once per day at the bank. Remote disbursement is very unpopular with creditors and may seriously affect a company's credit standing if used indiscriminately.

Target Balance Accounts

Target balance accounts in essence involve standing instructions regarding the transfer of funds above a pre-determined level. Funds deposited in the account in excess of the "target" balance will be transferred to the corporation's concentration accounts.

Although these services have helped substantially to improve a corporation's cash management in the United States, they do not apply to Hong Kong, where neither the advantages nor the disadvantages of vast distances within the territory affect the corporate treasurer. Rather, it is communication with overseas countries that present the most difficulty. Moreover, even for corporate treasurers in the United States, a number of problems remain. These are also shared by their counterparts in Hong Kong.

The Problems

Despite the availability of early corporate cash management services provided by banks, treausrers in the United States continue to be plagued by a number of problems, which are shared by financial executives in Hong Kong. Concomitant with rapid developemts in the use of computer in the office, these problems have accelerated the arrival of the second generation of cash management services.

The more serious of these problems include:

Lack of Up-to-date Information

Although concentration accounts and lock boxes have reduced the amount of time required for a cheque payment to be available for use, the corporation is still very much in the dark about how much cash it has in total at any one time. The average treasurer relies on a combination of out-of-date bank statements, telephone calls, clerical effort and estimates of unpresented cheques to arrive at the likely close of day balance. This lack of up-to-date information often led to lost interest on funds lying idle somewhere in the accounts of the corporation, especially in view of the high rates of interest prevailing in recent years.

Enormous Paper Flow

Lock boxes and zero balance accounts notwithstanding, communication between a corporation and its bank still involves an enormous flow of paper. Every transaction requires a duly authorised piece of paper, which has to be printed, completed, passed between banker and customer and processed. Not only is this manual processing of paper time consuming, it is also labour intensive and costly.

An article in the 15th February, 1985 issue of Asian Finance writes: "When a forex dealer buys or sells currency, he fills in a dealer ticket and duplicates the detail on to a running tally. The tickets are then collected through the day for a position keeper to consolidate into the ledger. The tickets are then passed on to the back office, which, then, prepares a position report. The whole process could take as long as twenty four hours to complete."[1]

Error Prone Communication

The voluminous paper work also gives rise to a number of errors. In the payment or transfer of funds, forms have to be written out, duly authorised and mailed to the recipient. Assuming that they do not get lost in the post or passed from one department to another, they have to be deposited on receipt, by the use of another form, processed through the clearing system and by the recipient banker. Eventually, of course, the cheque has to be processed by the issuing corporation's banker. In each of these steps, a single clerical error can be made, and it can be magnified during the processing.

International Scope of Business

Since Hong Kong is a major trading centre, corporate treasurers here are more sensitive to the hazards of international business such as dealing with a variety of foreign currency receipts and payments.

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[1] "The PC touch creates a new ambience in banking" Asian Finance 15th February, 1985, pg.77

A typical case in point is the operation of a foreign bank account, funded from local sources and upon which cheques are drawn and remittances made to, say, overseas suppliers. Funding decisions on such accounts can be hazardous and involve an element of guesswork in terms of the timing of transaction processing. Foreign exchange rates, of course, fluctuate. The onus is therefore on the corporate treasurer to avoid losses through conversion rates.

Inability to Anticipate Needs

Target balance accounts and lock boxes are services which facilitate what is already occurring --- cheques coming in and funds already deposited in accounts. However, they cannot help the corporate treasurer plan his company's cash needs. He cannot make projections and understand how he may be affected by the cash postion in three months

Needs of Corporate Treasurers

From the foregoing analysis of a corporate treasurer's problems, it is possible to surmise some of his needs if he is to manage the treasury function effectively:

1) timely and consolidated information about all the company's accounts
2) access to a worldwide multinetwork system
3) detailed information regarding transactions
4) current money market and foreign exchange information
5) error-free, secure and efficient communication with banks
6) historical data analysis
7) forecasting tools for the management of cash flow and investment portfolio
8) access to decision and analysis models

CHAPTER IV

ELECTRONIC CASH MANAGEMENT

Electronic Cash Management Services

Electronic cash management services were first offered in the United States in the mid-seventies in response to the needs of corporate treasurers that remain despite the availability of the first generation of services such as lock boxes and zero balance accounts.

Their acceptance in the United States can be partly attributed to the ever increasing use of microcomputers in the office. They were introduced into Hong Kong by an American bank in the late seventies. Although the number and variety of electronic cash management services available in Hong Kong is smaller than in the United States, their nature and characteristics are almost exactly the same. Most of these, however, are no more than extensions of existing relationships between banks and corporate customers.

Good cash management in a firm implies the receipt of _information_ about cash positions, the formulation of a plan through some _decision_ process, and the <u>implementation</u> of that plan. It is fitting that the electronic cash management services available can be divided into three main categories:

Information Services

These have been described by one banker as "classical" electronic cash management services. They satisfy the most basic needs of the treasurer and are usually useful for establishing what the current position is.

Decision and Planning Services

These are essentially tools and models which the corporate treasurer can use as an aid to making decisions after he has obtained the relevant information.

Action Services

These services enable the treasurer to take actions to implement a decision he has reached on the basis of the latest available information.

The different types of service in these categories are further explained in the the following sections. It is obvious that not every bank offering cash management systems to corporate clients provides all the services described. However, the purpose here is to obtain an overall picture of what is available, but not a detailed analysis of the specific packages from each individual bank. Such an analysis is beyond the scope of this short paper. The overall scheme of cash management services can be summarised as in Figure I on the following page.

Information Services

As we have already seen, one of the most basic and persistent problems faced by the corporate treasurer is the lack of up-to-date information about the availability of funds to the company and the volatile financial environment in which it is operating.

The information services provided by banks address this problem directly. It is possible to divide these services into three sub-groups in accordance with the type of information provided.

ELECTRONIC CASH MANAGEMENT SERVICES -- A STRUCTURE

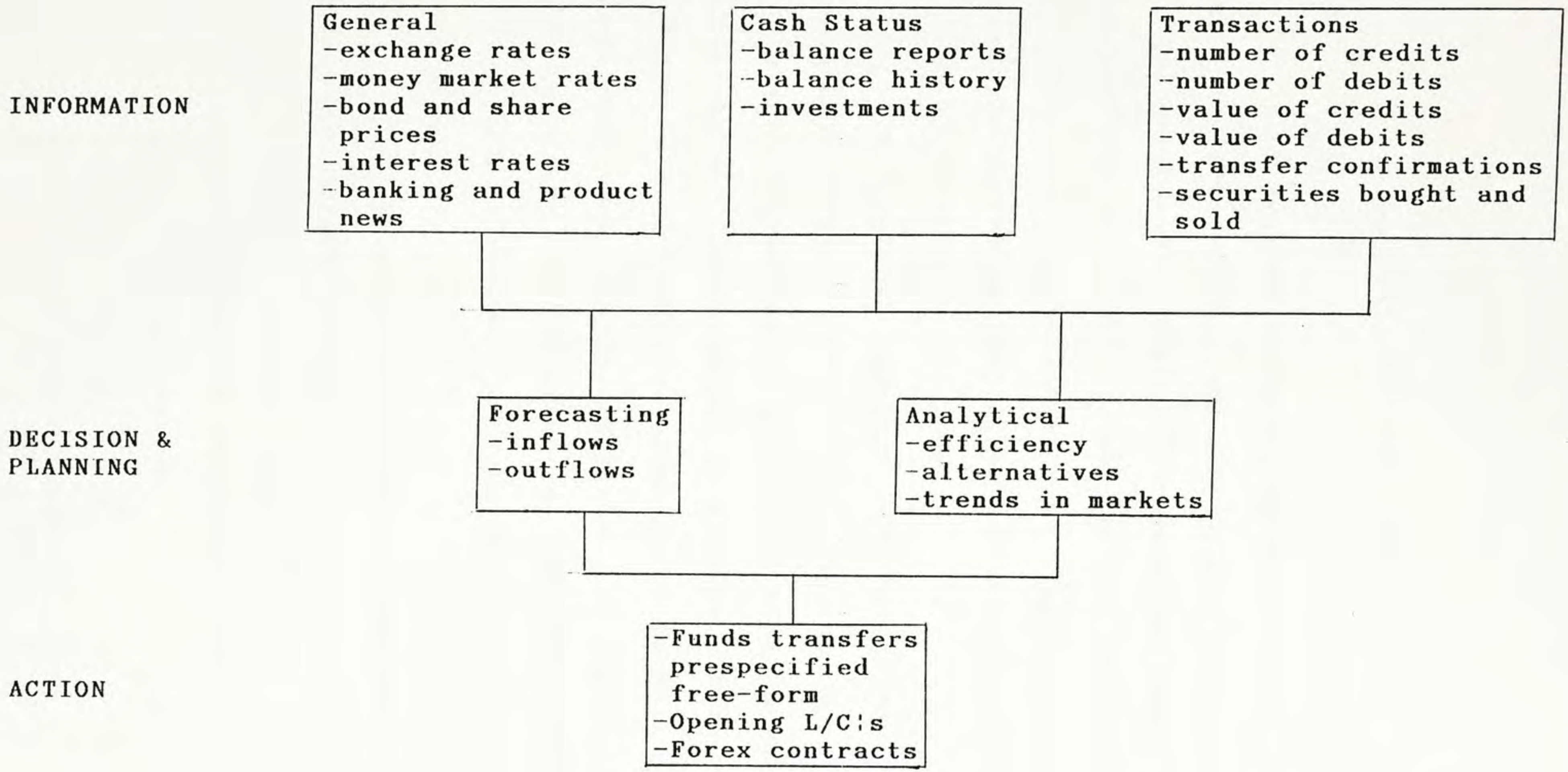

FIGURE I

General Financial Information

For a large trading company operating in Hong Kong, receipts and payments can involve large amounts in foreign currencies. One of the important tasks of the treasurer is, of course, to ensure that the company does not suffer any loss as a result of fluctuating exchange rates between the quotation for the order and the receipt of payment.

To be able to perform this "exposure minimising" function efficiently, the treasurer needs the latest information at his finger-tips to help him decide whether, for example, to take up a forward contract to sell a foreign currency or to sell spot when the payments are actually received. He may sometimes need the expert opinion of active participants in the market, such as dealers in banks and other financial institutions.

The information services in bank cash management systems encompass the following:

- currency exchange rates
- money market and commodity prices
- bond and share prices
- interest rates
- banking and product news

It may be worth noting that banks are not the only institutions offering this kind of general financial information. Reuters, for example, has been offering such a service via electronic systems far longer than many of the banks. However, banks consider that a comprehensive cash management system cannot omit such basic information.

Cash Position

In order that he may devise plans to manage his company's financial resources, the treasurer must also be fully aware of the available cash levels in all bank accounts.

Information related to the firm typically includes the following:

Balance Reporting

A balance reporting product provides the treasurer with the company's actual account balance, available balance, available balance at previous day's close, amount for value on the next business day, available balance at reporting day's opening, and sometimes amount for value after more than one business day.

Since some corporations have large numbers of bank relationships, they may need a "multibank" balance reporting capability. Although many systems also provide for this facility, many banks are reluctant to input information into the computer belonging to another bank for obvious security reasons. At present, therefore, it is not easy for the corporate treasurer to see consolidated balance reports on all the company's bank accounts by accessing the information system of one single bank. He usually has to collect all the data and consolidate them in his own microcomputer.

Balance History

Most cash management systems allow the corporate treasurer to examine the history of balances over a period of time immediately prior to the date of enquiry. This enables him to examine any untoward trends and danger signals. However, the length of time for which historical data are kept varies from one bank to another. It can be as low as three days or as high as several weeks.

Investment Management

A few systems are also capable of showing details about the firm's holding of investments, for example a schedule showing the maturities and next interest dates of certificates of deposit.

Transaction Information

Transaction detail reports elaborate on the transactions that have resulted in the cash positions summarised in balance reports. They include information on the total number and value of credits and debits, transfer information and confirmation, and even securities bought and sold.

This information is vital for corporate treasury staff, who need to reconcile and check each transaction that has been initiated. With the help of electronic services, they do not have to rely solely on misplaced, and sometimes indecipherable, telex copies. Some banks have recently also introduced a reporting service which gives a full account of unpaid letters of credit.

Decision and Planning Services

Although some of the later entrants into the cash management services market have not developed the capability to offer decision and planning services, these are already available in Hong Kong, perhaps in embryonic form, from the well established American banks.

In the United States, planning and decision services have reached a very high level of sophistication among some banks, including cash forecasting and analysis of cash management practices.

Cash forecasting employs quantitative tools to help a corporate treasurer project cash needs based on an estimation of clearing times of known deposits and disbursements applied to current balances.

Analytical services are reviews of the corporation's collection and disbursement practices by the bank. Recommendations are submitted after an analysis of data collected over a sample but representative period. The bank, by reference to information accepted by the industry such as check clearing times between countries, considers the efficiency of current practices and the alternatives available.

These services, however, are not yet available in Hong Kong, although the American banks do provide less sophisticated services along similar lines. Some cash management systems, for example, provide technical analyses on trends in the foreign exchange market. "Treasury workstations" also enable companies to analyse financial data and make projections using standard spreadsheet software.

Nevertheless, compared with the more basic information services, decision and planning services are not well developed in Hong Kong, probably due to the lack of demand among financial executives.

Action Services

Once the corporate treasurer has obtained all the necessary information and come to certain conclusions about what to do after some careful analysis, he has to implement plans to achieve the desired objectives. A plan of action is in reality a list of transactions the corporate treasurer has to initiate. Modern cash management services now allow many of these transactions to be performed electronically without human interference and the attendant exposure to error. These transaction services are mainly funds related or trade related.

Funds Related Services

The most important task for the treasurer to complete, after he has examined the total cash balances in his company's accounts and estimated its needs, is to move the excess funds from one account to another where there is a shortage, or withdraw and invest them in short term securities until they are needed. Most banks now have facilities that allow customers to transfer funds via computer terminals.

Two types of terminal initiated funds transfers are possible: prespecified and free-form.

Prespecified Transfers

Prespecified transfers only permit funds to be transferred to a previously specified payee and usually have other control variables such as a maximum amount of transfer.

Free-Form Transfers

A free-form transfer permits the corporate treasurer to initiate virtually any transfer desired, thus providing great flexibility but introducing some additional risk.

Free-form transfers must have significant built-in security features, such as multiple stages of approvals and personal passwords before release of the requested transfer.

Trade Related Services

Another very common need of treasurers in Hong Kong, which is a major trading centre, is the frequent use of letters of credit.

It is now possible for corporate customers to open and amend letters of credit using their computer terminals in the office. If the amount of the L/C is within an overall facility already arranged with the bank in advance, it is possible for it to be transmitted direct to its country of destination without interference by staff at the processing bank in Hong Kong.

In addition, a corporate treasurer can now initiate a spot or forward foreign exchange contract by computer, although in such cases, the preference for personal contact remains strong.

In the United States, cash managemnt systems have already been extended to include facilities for issuing commercial paper or buying and selling securities. However, these have not yet been introduced in Hong Kong.

Delivery Systems

As has already been mentioned, all the cash management services now available in Hong Kong are computer based, although they use a variety of systems and processing procedures. An understanding of the services cannot be complete without some knowledge of the technology that makes them possible.

Communications

Electronic cash management services, of course, rely heavily for their existence on advances in computer and communications technologies. Some banks have invested directly in satellite management services, in part to provide communications media for cash management services. Citicorp was the first financial institution to establish its own satellite communications facility.

Although many other banks also use satellite data links to deliver cash management services, they do so through other vendors rather than investing in their own equipment.

Access Facilities

Access facilities for cash management systems include a variety of terminal approaches and direct computer-to-computer links. The most popular form is the acoustically coupled teleprinter terminal, a relatively low cost and efficient data handling method. CRT based "intelligent" terminals are also becoming increasingly popular. Their greater flexibility and speed have made them the primary terminal offering of leading cash management vendors.

Direct computer-to-computer links are necessary for high speed, high volume applications. These have so far not developed in Hong Kong due to a general lack of demand. Such arrangements require a high degree of system sophistication on the part of the treasury operations.

Several of the leading banks provide their cash management customers with a terminal free of charge to encourage usage. Those that do not, however, analyse the needs of their customers and recommend a terminal they should use. Most cash management systems in Hong Kong, in any case, are compatible with a large variety of terminals.

Data Communication Networks

Banks which offer cash management services can either implement their own networks or use the services of an international communications network operator. Since most of the banks offering cash management services in Hong Kong are branches of foreign banks, the decision on data communication is obviously the responsibility of their head offices overseas.

Proprietary networks are less popular mainly because of the vast investment required in both acquisition of hardware and in software development. The two leading American banks, Citibank and Chase Manhattan, operate a proprietary network, although the latter actually operates through a wholly owned subsidiary.

Most other banks rely on third party networks to deliver their cash management services. It seems that General Electric Information Service Co. (GEISCO) is a popular choice.

Also playing a crucial role in global cash management, of course, are a number of interbank networks, which do not apply to communication at customer level. These might be called "networks behind the scene".

A variety of government, private, national and international systems make up these banking networks. Among the most important to the spread of international cash management services is the Society for Worldwide Interbank Financial Telecommunications (S.W.I.F.T.) network, which provides 1,000 banks worldwide with an international financial telecommunication system that is highly reliable, secure and operationally efficient.

File Updating

If the information available to corporate treasurers is to be completely up-to-date, it is of course necessary for banks to up-date their files constantly as transactions occur. However, it appears that customers usually have the need for information only once or twice during the day. Real-time updating, therefore, is not very cost efficient. Most banks in Hong Kong adopt the batch processing method to up-date customer files; some several times a day, some once a day only.

Processing

One of the main differences between systems offered by Citibank and Chase Manhattan typifies the two alternatives available. Citibank's system uses distributed processing, while Chase's uses centralised processing. When a Citibank customer wishes to find out the balance of his account in a particular U.S. city, for example, he has to access the computer file maintained in that branch direct; whereas Chase collects these files into a central location. There is, of course, a marked difference in response time between the two systems.

Market Acceptance

It has been some six or seven years since electronic cash management systems were introduced into Hong Kong. Although the pioneers have reported increasing the sophistication and variety of services they offer, they also point to slow progress in convincing customers to use them.

Most banks generally agree that the market in Hong Kong is reasonably small to begin with, mainly because the services are worth using only if a company has the need to process a large number of international cash transactions. They are certainly not suitable for small manufacturing and trading concerns that make up more than eighty per cent of Hong Kong's businesses. Some banks even go so far as to estimate that potential customers in Hong Kong only number a few hundred.

It appears that it is not only Hong Kong where there has been resistance to electronic cash management services. The same resistance has been experienced in other Asian countries.

Banks point to one important reason for this --- the relative abundance, hence low cost, of labour. Cash management services, stripped of their fancy appellations, are actually labour saving devices first and foremost. Asian corporate customers have simply not accepted that while they can employ labour cheaply, the services are of any great advantage. Asian managers tend to be more cost conscious per se, while their American and European counterparts tend more to be "optimisers".

In addition usage among those who have been convinced is confined to balance reporting and enquiry services. There is still some scepticism about the other services, perhaps due to unfamiliarity.

Why Banks Offer the Services

A reasonable number of banks are now offering electronic cash management services. They obviously see some benefits and value in doing so. It is thus easy for us to lose sight of the fact that they were reluctant to develop these services at the beginning.

A number of reasons account for this initial reluctance. For example, the services represent a major break from tradition; processing in banks has been inward directed; and banks have lacked sensitivity in general to market needs. However, the most fundamental reason is that bankers view these services as directly threatening their lifeblood.

Traditionally banks have made a great deal of money on idle funds left in customers accounts, through either lending or investment. By providing cash management services, they are enabling customers to manage their cash better, hence eliminating the banks use of existing free funds. Why then, are banks willing to offer and develop these services?

Competition

Fierce competition among banks for declining business has been a major reason to diversify into cash management services. This is particularly so in Hong Kong, which is generally regarded as overbanked with some 140 licensed banks operating more than 1,500 branches. This has inevitably led to a highly competitive environment in which banks find it more and more difficult to retain existing business, let alone attract new customers.

In this environment, banks are less likely to win a new customer with the offer of fine foreign exchange rates or a well-priced lending facility --- the corporate customer usually has taken advantage of the competition in the banking industry and is already obtaining his foreign exchange and borrowing requirements from the market at the best rates. The banks, consequently, have been forced to explore other means of selling themselves.

Bankers frankly admit to the fact that offering cash management services has stabilised their relationships with many corporate customers, especially because they sometimes waive the charges in view of other income from them.

Customers, on the other hand, agree that they have increased the amount of business to the bank whose cash management services they are using. They even point to the possibility of using that bank as their main bank.

Alternative Income

With the current international debt situation, banks are particularly wary of bad quality loans. Most have become more conservative, with the result that the income generated by their loan portfolio is substantially reduced. The chase after good quality borrowers at the same time has led to a squeeze on interest rates and profit margins.

Banks therefore have to find alternative sources of non-credit related income. Cash management services, once fully developed and marketed, can generate a fair amount of fee income.

Benefits to Banks

With the rapid development of computer technology, market pressure on banks to develop electronic cash management services has become much stronger than before. Banks which have succumbed to this pressure, of course, have derived a number of benefits. These include:

More Business/Revenue

Most banks have found that by providing efficient cash management systems they have been able to gain additional business from their customers, who either concentrate their funds in these banks or take up additional facilities. Although the services require substantial investment at the beginning on computer hardware and software, they do generate some fee income. In the short term, the fees are not nearly enough to offset the investment, but they contribute significantly to the banks' efforts in recent years to limit balance sheet growth and seek alternative sources of revenue.

Better Competitive Edge

Banks which offer cash management services are in a better position to counter the aggressive stances of competitors. For the international banks without a sizeable branch network in Hong Kong, the range of services available can be a crucial factor in how competitive they are. Cash management services can give many banks that competitive edge they need to maintain growth, or perhaps even ensure survival.

Closer Customer Relationship

As the market becomes more competitive, customers become more discerning and less loyal to the banks they have been using, unless there are compelling reasons for remaining loyal. One basic way to maintain a bank's business is to ensure that it keeps and develops existing customer relationships. From a marketing point of view, it usually requires less effort to gain additional business from existing customers than it is from a completely new one. Once a customer begins to use cash management services, his reliance on the bank providing them is substantially increased. It will require more determination for him to sever the relationship from then on.

Better Efficiency

One of the less obvious benefits to banks is the efficiency inherent in the services. Banks have learned from their customers how to use information electronically delivered into their own operating departments to achieve considerable savings through a reduction in processing time for routine banking transactions. At the same time, banks do not need as much administrative support as before to deal with customer enquiries. This reduction in back office clerical and administrative staff now possible enables banks to direct more efforts to marketing and the acquisition of new business.

Benefits to Customers

While some banks have been offering cash management services more or less by necessity, because of either fierce competition or market trends, customers have been in a slightly more flexible situation. It appears that although competition and market trends also play a part in their decision to use these services, they have been motivated more by the benefits available. The benefits that customers derive from electronic cash management services in truth boil down to one basic principle --- a drastic reduction in the time, cost and complexity of communicating with banks. Figures II and III illustrate this point.

Figure II depicts the traditional channels of communication a corporate treasurer has with his company's accounts --- a mixture of telephone lines with frequent interference, garbled telex messages and much paper flow.

Figure III illustrates the situation in which electronic cash management eliminates many of these stumbling blocks. In the true sense of the word, cash management is now "streamlined". In greater detail, the benefits manifest themselves in the following ways:

Better Return on Cash

The timeliness and efficiency with which information about the company's holdings is available has enabled the corporate treasurer to plan cash movements much more effectively. The capability for electronic funds transfer, of course, allows him to turn his plan into reality at the touch of a finger in the office.

Above all, the corporate treasurer now can reduce the number of "piecemeal" decisions and has a

TRADITIONAL COMMUNICATION WITH BANKS

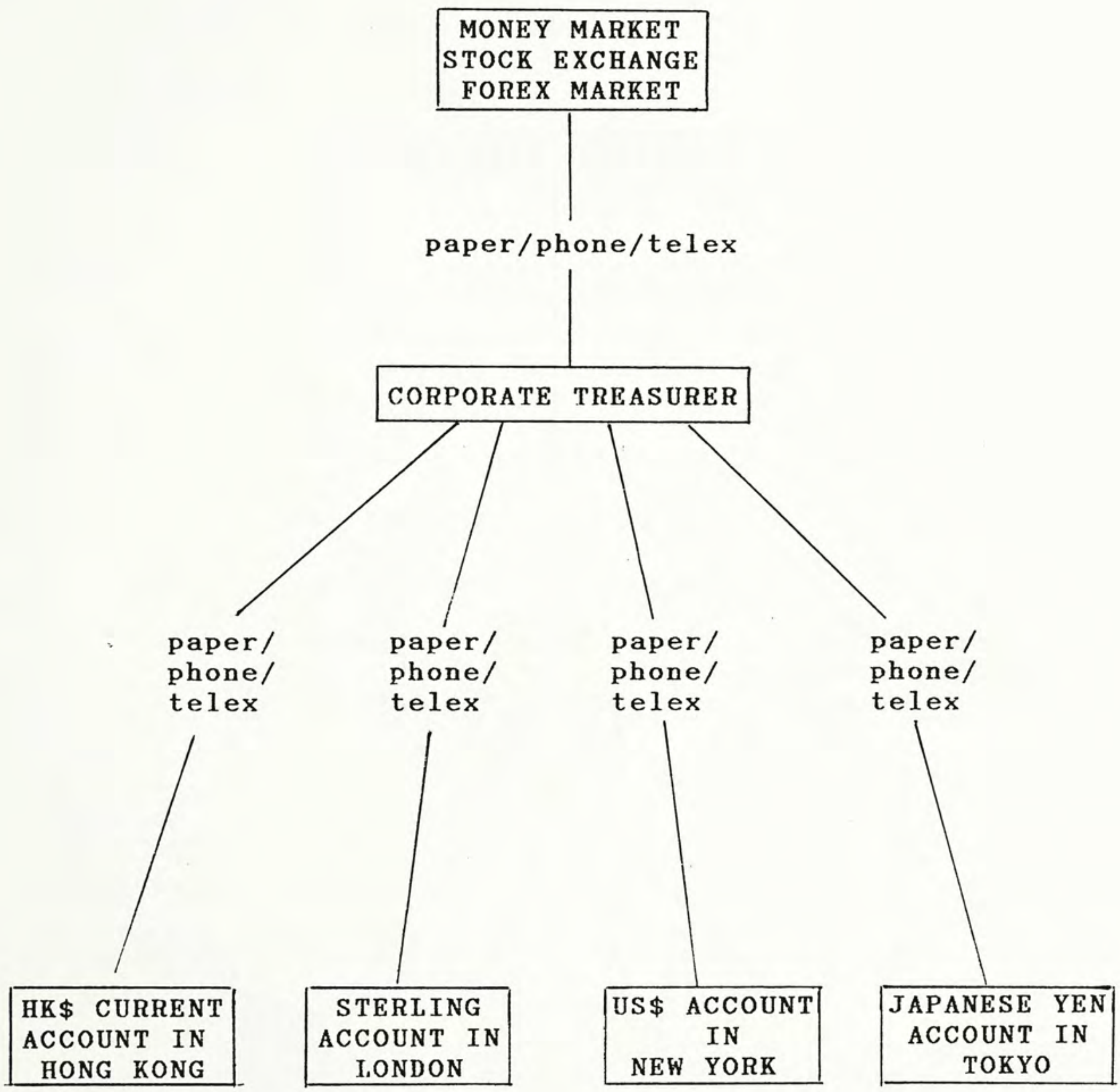

FIGURE II

ELECTRONIC CASH MANAGEMENT
STREAMLINES COMMUNICATION

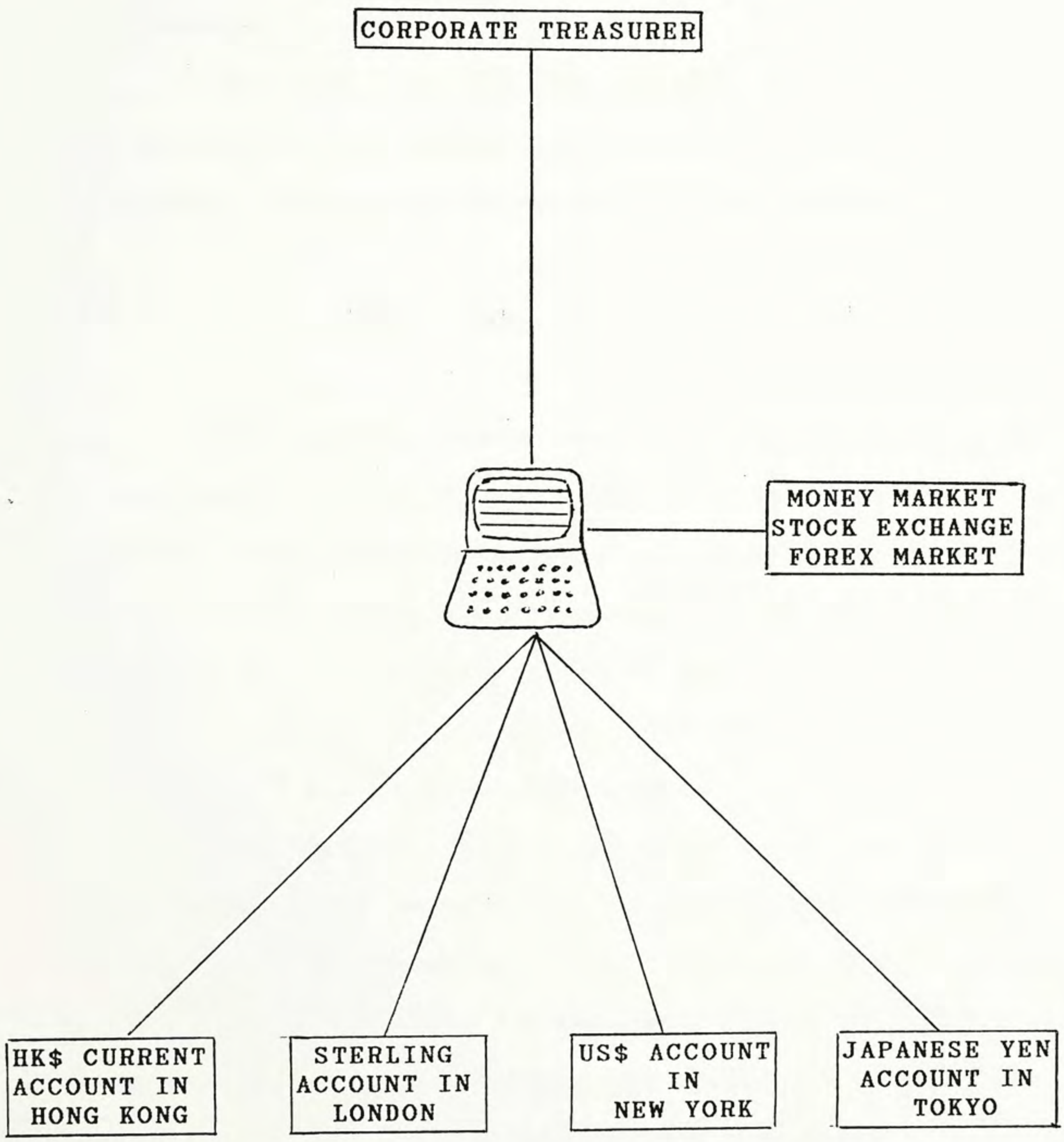

FIGURE III

better overall picture of the company's cash position at the start of a business day. Moreover, the availability of the most up-to-date foreign exchange, money market and interest rates also enable him to choose investment vehicles and exploit market opportunities with more confidence.

The upshot of all this is that with the same cash resources, the corporate treasurer is now better equipped to earn a higher return for the company.

Higher Staff Productivity

Whereas previously the corporate treasurer had to send many telexes and make numerous telephone calls before he could assemble a rough picture of the company's current financial situation, all he has to do now is to key in a few messages on the keyboard at the computer terminal in the office. The saving in sheer human labour is sometimes staggering.

In addition, of course, there is a concomitant reduction in paper flow between a company and its bank, thus drastically reducing the potential for error. While it may not be true to say, at this stage, that there is always a cost saving, the ability for corporate treasury staff to perform more useful and productive tasks is of great benefit to the company.

Better International Coordination

Before the arrival of electronic banking, coordinating the international cash movements of companies relied on the telephone and the telex machine, which could be slow, inefficient and temperamental at times. The fast and accurate access now possible to international financial information is particularly useful for the Hong Kong treasurer who has to monitor many accounts in different trading centres.

International cash management systems are likely to facilitate more centralised corporate control of treasury operations. In the past, many corporations may have preferred to keep foreign subsidiaries under tighter control, but found that distance and time differences made doing so highly impractical. With the benefit of global, near real-time control of cash balances and funds transfer, corporate treasurers are now able to opt for more centralised control.

More Business/Revenue

The automation of the treasury function means that it can handle more business and transactions in a given amount of time. An institution estimates that over the five years since it first started using cash management services, its total foreign exchange volume per day has increased from 130 deals to 400 deals.

Some Other Aspects

Some other aspects with which we should be concerned in considering the usefulness of electronic cash management services are the security of the systems, how customers are charged, legal responsibility and customer satisfaction.

Security

Security is an aspect of electronic cash management services that still looms quite large in the minds of corporate treasurers. This is particularly so in respect of any service related to the initiation of a transaction, e.g., transfer of funds or payment instructions.

There are two aspects to this concern --- the first is related to the security of the computer system; the second to internal security of the company.

Although the use of computers in the office has spread by leaps and bounds in recent years, many financial executives are still somewhat unfamiliar with electronic devices. Despite the existence of numerous passwords, identification codes and access permissions, unauthorised entry into the system is still perceived to be a genuine threat. It appears that this concern, although valid, is not very rational. The various protective devices that are now in force to prevent fraudulent use of cash management systems are more elaborate, and no less reliable, than the traditional methods of verifying signatures and telex test keys.

The second aspect of security within the company is perhaps a little more reasonable. One of the reasons cited for usage of cash management systems being limited to balance enquiries is that for many companies, internal security measures aimed at stratifying levels of personnel authorised to access the system for different transactions are difficult to implement.

Charging

Another important consideration for corporate treasurers when they try to decide whether to use cash management services is the cost they are asked to pay.

We have already referred to Asian managers as being more cost conscious. In other words, they tend to be shrewder than their American or European counterparts in measuring the cost of a service against its benefits.

Customers repeatedly claim that they are willing to use the services only because they are provided free of charge in view of other business they channel through the banks. This does not mean that banks do not have a detailed schedule of charges, although it is subject to much flexibility.

A popular method of charging is based on transaction volume and amount of information accessed. Alternatively, some banks charge on the basis of computer time-sharing units. Some banks, however, provide certain services free as an incentive, and then charge for the use of others using either one of the above methods.

Legal Responsibility

The rapid development of global cash management systems is presenting a formidable challenge to the traditional concepts of allocating business risk and legal responsibility.

The following example illustrates this thorny aspect of electronic banking. A corporation's internal treasury management system generates a funds transfer message and sends it through a third party communication network to the corporation's bank, which in turn sends a funds transfer message via S.W.I.F.T. presumably to the bank of the intended recipient. If the designated recipient does not receive the funds and if the paying corporation suffers severe loss, it would be difficult to determine the fault and the extent of the contingent liability.

Customer Satisfaction

All users of cash management systems agree unanimously that they are very satisfied with the services they are using. The systems are apparently very reliable and down time is minimal. The occurrence of errors is a rarity. They particularly point to the "after sales" service of the banks, whose officers pay frequent visits to identify problems, investigate needs and provide guidance.

Unfortunately, the fact that banks are adopting an extremely flexible charging policy means that the users are not able to discuss concrete assessment of the value of investment in the services.

Future Prospects

Banks and customers agree that Hong Kong is still a fledgeling market for electronic cash management. Much educational work still needs to be done to convince financial executives of the concrete benefits of the balance reporting services, basic as they are, already available.

The consensus seems to be that the decision and planning services will take some years before they are generally accepted.

Banks, however, are not daunted by the resistance they have experienced in marketing these services. Although the absolute number of customers may be small, the potential they present is quite significant.

Generally speaking, electronic cash management is considered evolutionary rather than revolutionary. However, the progression from information to decision and planning, and then to action services is not necessarily taken for granted.

Strangely enough, some users see the future for electronic cash management in the reduction of routine accounting operations such as apportioning expenses at the same time as cheques are issued.

Thus, it can be seen that the future for cash management services is still very much perceived to be reduction of labour and simplification of operation.

The value of such services in planning, analysis and transaction initiation is perhaps not as well recognised as it should be, and progress in those directions will be slow.

CHAPTER V

SUMMARY AND CONCLUSIONS

Just as automatic teller machines allow the man in the street to manage his funds better by making small but frequent withdrawals, deposits and transfers more convenient, electronic cash management systems provide similar benefits to corporations domestically and on a global scale.

Electronic cash management services place the modern treasurer in an unprecedented and favourable position to adopt the strategies and objectives outlined in Chapter II. They, of course, are but aids to the treasurer and not ends in themselves. Hence, they can only be "partial" systems at best.

Large corporations with complex international account relationships have benefited most from these services, both in terms of reducing the cost of labour and error, and in terms of minimising losses through lack of up-to-date information.

In a little over half a decade, they have not developed as rapidly as electronic banking at the retail level. However, for the small mumber of corporations who are using these services, concrete benefits have already been experienced.

While office automation may be a catalyst to the development of electronic cash management, much of the development in the foreseeable future will be in the information related services.

APPENDIX 1

SAMPLE BALANCE REPORT

STANDARD CHARTERED BANK
INTERNATIONAL CASH MANAGEMENT SERVICES

BALANCE REPORT as at November 14th, 1985
For: ABC MANUFACTURING INTERNATIONAL IN USD
Produced: November 15th, 1985 at 14:54 LT

STANDARD CHARTERED BANK, NEW YORK

Account : 123456789
Account Type : CURRENT ACCOUNT

Ledger Balance Close	14 Nov	: 19,050.50
Available Balance Close	14 Nov	: -4,250.00
Amount for Value	15 Nov	: 22,800.50
Available Balance Open	15 Nov	: 18,550.50
Amount for Value 18 Nov + Future		: 550.00
Interest Rate		: -11.50
Total Credits		: 20,550.75
No. of Credits		: 17
Total Debits		: 17,750.25
No. of Debits		: 19

Account : 223577890
Account Type : CALL DEPOSIT

Ledger Balance Close	14 Nov	: 24,949.75
Available Balance Close	14 Nov	: 22,550.50
Amount for Value	15 Nov	: 1,750.00
Available Balance Open	15 Nov	: 24,300.50
Amount for Value 18 Nov + Future		: 649.25
Interest Rate		: +8.5625
Total Credits		: 35,560.55
No. of Credits		: 22
Total Debits		: 37,360.55
No. of Debits		: 26

STANDARD CHARTERED BANK, NEW YORK - Totals

Ledger Balance at close last bus day	: 44,000.25
Available Balance at close last bus day	: 18,300.50
Amount for Value next bus day	: 24,550.50
Available Balance next bus day	: 42,851.00
Amount for Value after 2+ bus days	: 1,149.25
Total Credits	: 56,111.30
No. of Credits	: 39
Total Debits	: 55,110.80
No. of Debits	: 45

APPENDIX 2

SAMPLE TRANSACTION DETAIL REPORT

STANDARD CHARTERED BANK
INTERNATIONAL CASH MANAGEMENT SERVICES

TRANSACTION DETAIL REPORT at November 15th, 1985
14:56 LT

For : ABC MANUFACTURING INTERNATIONAL

CHARTERED BANK, SINGAPORE

Account Number : 223456789 in SGD
Date of Entry : November 14th, 1985

Credits

Item Detail	Value Date	Transaction Amount
CHEQUE DEPOSIT PACKAGE	14 Nov	5,210.50
CHEQUE DEPOSIT PACKAGE	15 Nov	5,174.00
TELEGRAPHIC TRANSFER	14 Nov	3,401.50
BRUNEI		
LEON BROS REF AL/494		
MAIL TRANSFER	14 Nov	1,757.50
CITIBANK		
PROCEEDS BILL OC 4962	14 Nov	1,278.00
PER CROSBY HOUSE ORDER	14 Nov	1,236.50
S.L. WONG		
2 OTHER ITEMS LESS THAN MIN. VALUE OF 1000		200.00
	Total	18,258.00

Debits

Item Detail	Value Date	Transaction Amount
CHEQUE NO. 498672	14 Nov	3,516.00
CHEQUE NO. 498681	14 Nov	3,022.00
CHEQUE NO. 498683	14 Nov	2,337.25
TELEGRAPHIC TRANSFER	14 Nov	1,750.75
SCB LONDON A/C INLAND		
PROPS.		
		10,626.00

APPENDIX 3

SAMPLE FOREIGN EXCHANGE

CONTRACT REPORT

STANDARD CHARTERED BANK
INTERNATIONAL CASH MANAGEMENT SERVICES

FOREIGN EXCHANGE CONTRACT REPORT produced on Nov 15th, 1985
at 14:45 LT

BANK : CHARTERED BANK, HONG KONG
VALUE DATE : 15 NOV 1985

DEAL NO. DATE	CURR	AMOUNT	FX RATE	REMARKS
1234567890	WE SELL USD	1,250,125.55	1.55630	OPTION
21SEP85	WE BUY GBP	803,267.72		
1223345	WE SELL USD	35,000.00	2.0542	
16OCT85	WE BUY CHF	71,897.00		
123458	WE SELL USD	422,100.90	1.55642	
14NOV85	WE BUY GBP	271,199.82		
123459	WE SELL USD	22,978.00	1.55642	
14NOV85	WE BUY GBP	14,763.36		
98765	WE SELL GBP	2,511,111.07	3.185	
14NOV85	WE BUY CHF	7,997,888.75		

VALUE DATE : 16NOV 1985

DEAL NO. DATE	CURR	AMOUNT	FX RATE	REMARKS
286420	WE SELL USD	510,000.07	2.490	
30MAY85	WE BUY DEM	1,270,000.00		
286422	WE SELL USD	200,000.00	1.55642	BAL/OPT.
22OCT85	WE BUY GBP	128,500.00		
286423	WE SELL USD	420,000.00	197.5	
15NOV85	WE BUY JPY	82,950,000.00		

APPENDIX 4

QUESTIONNAIRE FOR CUSTOMERS

1. Definition
   What do you understand by cash management services provided by banks? Could you please give a brief definition?
2. History
   a) How long have you been using cash management services provided by banks? Which banks?
   b) Have you increased or decreased the use of these services over the years?
3 Motives and Values
   a) What prompted you to use cash management services?
   b) Are you satisfied with the services you are using?
   c) Do you think the services are worth the expenditure they require?
4. Types of Services Used
   a) Which are the cash management services you use most often?
   b) What is your assessment of these services?
   c) How specifically have these services helped you? Please give examples.
5. Needs
   a) What are your cash management needs?
   b) Do your bank s (banks) services satisfy these needs?
   c) Are there services you would like to use but which are not available at present?
   d) How do you think these services will help you?
6. Systems
   a) Did you have to instal special equipment to use the services?
   b) Did you have to train your staff to use the equipment?
   c) Do the bank s cash management systems and equipment function properly --- e.g., in terms of response time, down time, etc.?
7. Charging
   a) How are you being charged for using cash management services?
   b) Do you consider the charges reasonable?
   c) If not, how would you like to be charged?
8. Relationship
   a) Have the services affected the relationship between you and your banks?
   b) Are you now using more or less banks than before you started using cash management services?

APPENDIX 4 (CONTINUED)

9. The Future
What role do you expect cash management services (and the banks providing them) to play in your corporate financial management programme?

APPENDIX 5

QUESTIONNAIRE FOR BANKS

1) Definition
   What do you understand by cash management services ? Could you please give a brief definition?
2) History
   a) When did you begin to offer the services in Hong Kong?
   b) Have the services been gradually expanded over the years, or have they stayed the same?
   c) Which were the first services you introduced?
3) Motives & Profitability
   a) What were the main reasons that prompted you to provide these services?
   b) How well do you think the services have been accepted?
   c) Are the services capable of generating enough revenue to justify their independent existence, or do they rely on other souurces of revenue for support? If they are self-financing, what is your rough estimation of profitability?
4) Types of Service
   a) What are the services you provide? Please explain briefly the features of each.
   b) Which of these are more welcome by customers in your view?
   c) How different are these services from thoose offered overseas, e.g., in the U.S., U.K. or Europe?
   d) Have some of these services been modified to suit the needs of local customers? Which and how?
   e) Are there new services you will be introducing in the future?
5) Systems
   a) What kind of data processing and communications systems do you use to provide the services?
   b) What are advantages and disadvantages of your system, and in your view those of your competitors ?
   c) What kind of equipment do you require your customers to have before they can use your cash management services?
   d) Do you provide your customers with compatible terminals as incentives? Do you provide training to customers staff to get the most out of your cash management services?

APPENDIX 5 (CONTINUED)

6) Target Customers
   a) What types of customers are your services aimed at?
   b) What in your view are the needs of these customers in relation to cash management?
   c) Do you think these needs are well satisfied by your services? How do you know?
7) Charging
   a) How do you charge your customers for using these services? What is the basis on which you determine these charges?
   b) How does your charging system differ from that you use overseas for similar services?
8) Usefulness
   a) How specifically do you think your customers in Hong Kong have benefited from your services?
   b) By virtue of providing these services, do you think you have improved the relationship between you and your corporate customers?
9) a) What do you think are prospects for the further development of cash management services in Hong Kong?
   b) What needs are there among customers you do not yet satisfy?
10) Marketing
   a) What are your marketing objectives?
   b) How do you promote your services?

APPENDIX 6

INSTITUTIONS INTERVIEWED FOR THE REPORT

Banks

Chase Manhattan Bank

Citibank

Hongkong & Shanghai Banking Corporation

Standard Chartered Bank

Customers

East Asiatic Company

Esso (Hong Kong) Limited

Jardine Fleming Company Limited

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